

the power center, and a grounding circuit, originating at the grounded side of the grounding resistor, shall extend along with the power conductors and serve as a grounding conductor for the frames of all the electrical equipment supplied power from that circuit, except that the Secretary or his authorized representative may permit ungrounded low- and medium-voltage circuits to be used underground to feed such stationary electrical equipment if such circuits are either steel armored or installed in grounded rigid steel conduit throughout their entire length. The grounding resistor, where required, shall be of the proper ohmic value to limit the ground fault current to 25 amperes. The grounding resistor shall be rated for maximum fault current continuously and insulated from ground for a voltage equal to the phase-to-phase voltage of the system.

§ 75.902 Low- and medium-voltage ground check monitor circuits.

[STATUTORY PROVISIONS]

On or before September 30, 1970, low- and medium-voltage resistance grounded systems shall include a fail-safe ground check circuit to monitor continuously the grounding circuit to assure continuity which ground check circuit shall cause the circuit breaker to open when either the ground or pilot check wire is broken, or other no less effective device approved by the Secretary or his authorized representative to assure such continuity, except that an extension of time, not in excess of 12 months, may be permitted by the Secretary on a mine-by-mine basis if he determines that such equipment is not available. Cable couplers shall be constructed so that the ground check continuity conductor shall be broken first and the ground conductors shall be broken last when the coupler is being uncoupled.

§ 75.902-1 Maximum voltage ground check circuits.

The maximum voltage used for such ground check circuits shall not exceed 40 volts.

§ 75.902-2 Approved ground check systems not employing pilot check wires.

Ground check systems not employing pilot check wires will be approved only if it is determined that the system includes a fail safe design causing the circuit breaker to open when ground continuity is broken.

§ 75.902-4 Attachment of ground conductors and ground check wires to equipment frames; use of separate connections.

In grounding equipment frames of all stationary, portable or mobile equipment receiving power from resistance grounded systems separate connections shall be used when practicable.

§ 75.903 Disconnecting devices.

[STATUTORY PROVISIONS]

Disconnecting devices shall be installed in conjunction with the circuit breaker to provide visual evidence that the power is disconnected.

§ 75.904 Identification of circuit breakers.

[STATUTORY PROVISIONS]

Circuit breakers shall be marked for identification.

§ 75.905 Connection of single-phase loads.

[STATUTORY PROVISIONS]

Single-phase loads shall be connected phase-to-phase.

§ 75.906 Trailing cables for mobile equipment, ground wires, and ground check wires.

[STATUTORY PROVISIONS]

Trailing cables for mobile equipment shall contain one or more ground conductors having a cross-sectional area of not less than one-half the power conductor, and, on September 30, 1970, an insulated conductor for the ground continuity check circuit or other no less effective device approved by the Secretary or his authorized representative to assure such continuity, except that an extension of time, not in excess of 12 months may be permitted by the